RE: Osh Kosh - P limitation
Sachs, Richard P - DNR
to:
John Wiemhoff
10/22/2012 04:02 PM
Hide Details
From: "Sachs, Richard P - DNR" <Richard.Sachs@wisconsin.gov>
To: John Wiemhoff/R5/USEPA/US@EPA,
History: This message has been forwarded.

John,

As I mentioned during our phone conversation, we received similar comments during the public comment period. Here are those comments and the draft responses to them:

**Midwest Environmental Advocates submitted the following comments on the proposed permit:**

**1. Comment:** The Department should consider the discharge's impact on the phosphorus-impaired water directly downstream and calculate the City of Oshkosh's phosphorus WQBEL to protect the downstream water.

**Response:** Pursuant to s. NR 217.13 (b), Wis. Adm. Code, the Department must calculate WQBELs based on applicable phosphorus criteria at the point of discharge, except the Department may calculate limits to protect downstream waters. The latter approach is optional. While Department guidance recommends phosphorus WQBELs be based on downstream water quality criteria when the discharge is upstream of a reservoir or lake, the guidance does not supersede the Department's decision to develop a water quality management plan with total maximum daily loads that address both point and nonpoint sources rather than imposing WQBELs based on downstream water quality criteria on individual point sources. It is also noted that, as a measure of protection of Lake Winnebago, a phosphorus mass effluent limit is included in the permit. No changes were made to the permit as a result of this comment.

**2. Comment:** The Department cannot avoid setting a WQBEL protective of Lake Winnebago because a TMDL model has yet to be developed.

**Response:** The Department has considered, and continues to take seriously, the impacts of phosphorus loading to Lake Winnebago from all point sources and nonpoint sources in the Upper Fox and Wolf River Basins. Monitoring and modeling in those basins are currently underway with the goal of having an approved water quality management plan with total maximum daily loads (TMDL) in the near future. The Department believes that the TMDL process is the most economically efficient and expedient method to attain phosphorus water quality standards in Lake Winnebago and its watershed, and has decided to implement such a process rather than impose WQBELs based on downstream water quality criteria on individual point sources. No changes were made to the permit as a result of this comment.

I will attempt to find out what the projected time frame is for completion of the Lake Winnebago TMDL.

Thanks,

Dick Sachs
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**From:** Wiemhoff.John@epamail.epa.gov [mailto:Wiemhoff.John@epamail.epa.gov]
**Sent:** Monday, October 22, 2012 1:55 PM
**To:** Sachs, Richard P - DNR
**Subject:** Fw: Osh Kosh - P limitation

FYI

----- Forwarded by John Wiemhoff/R5/USEPA/US on 10/22/2012 01:54 PM -----

From: David Werbach/R5/USEPA/US
To: Stephen Jann/R5/USEPA/US@EPA,
Cc: John Wiemhoff/R5/USEPA/US@EPA, kuefler.patrick@epa.gov
Date: 10/22/2012 01:48 PM
Subject: Re: Osh Kosh - P limitation

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Lake Winnebago is listed on the 2012 draft list as impaired due to low DO, eutrophication, and turbidity. Pollutant cause are sediment and total phosphorus As far as I can tell, the Fox River between Lake Butte Des Morts and Lake Winnebago is not listed for TP, only for PAH just upstream of Lake Winnebago (a 1/2 mile stretch).

From: Stephen Jann/R5/USEPA/US
To: John Wiemhoff/R5/USEPA/US@EPA,
Cc: David Werbach/R5/USEPA/US@EPA, kuefler.patrick@epa.gov
Date: 10/22/2012 01:28 PM
Subject: Re: Osh Kosh - P limitation

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Thanks, John. I'm leaning heavily toward the position that the limit needs to be set based on the L. Winnebago WQC. The Fox River data indicate that the river does not have capacity to assimilate P prior to the river entering the lake. Please check with WWB to see if the lake is on the State's 303(d) list.

Stephen M. Jann
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From: John Wiemhoff/R5/USEPA/US
To: Stephen Jann/R5/USEPA/US@EPA,

Cc: David Werbach/R5/USEPA/US@EPA, kuefler.patrick@epa.gov
Date: 10/22/2012 01:13 PM
Subject: Osh Kosh - P limitation

Attached is the second question/my response following our WI Phosphorus meeting this morning. The final resolution may be dependent upon Dave Werbach's response to the first question.

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**Per the WQBEL documentation provided by WDNR,**

1. WQ criteria for the Fox River in vicinity of Osh Kosh is **100 ug/**l (0.1 mg/l)
2. The median of 13 sampled P concentrations taken in the Fox River near the Osh Kosh outfall = **85 ug/l** (0.085 mg/l)
3. The $7Q_2$ in the Fox River = **1,350 cfs**
4. The design flow of the Osh Kosh WWTP is 20 MGD (**31 cfs**)
5. The WDNR calculated P WQBEL, based on the mass balanced calculations using the above data, is **0.75 mg/l.**
6.

Based on the above, and information on the historical WWTP sampled P levels of 0.67 mg/l from the WWTP's effluent, the plant can meet the WQBEL (proposed effluent limitation) of 0.75 mg/l.

**If Lake Winnebago (1.25 miles downstream) drives the effluent P limit (where the effluent would have to meet a .04 mg/l limit), it would be a major game changer.**

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----- Forwarded by John Wiemhoff/R5/USEPA/US on 10/22/2012 12:52 PM -----

From: John Wiemhoff/R5/USEPA/US
To: David Werbach/R5/USEPA/US@EPA,
Cc: Stephen Jann/R5/USEPA/US@EPA
Date: 10/22/2012 12:34 PM
Subject: Re: Request for Information

**Thanks again Dave**.

The discharge of Osh Kosh's primary WWTP effluent pipe occurs within the Fox River, downstream of Lake Buttes des Morts, but upstream about 1.25 miles from Lake Winnebago.

Steve Jann suggested that I check on 2 things:

1. **Which WQ standards for P would apply based on the 1.25 mile upstream of Lake**

**Winnebago? A) the river WQ standard for the Fox River, or 2) the WQ standard for Lake Winnebago (listed as 0.04 mg./l)**

2.

2. Check on the levels of P in the Fox River (at appropriate low level condition within the vicinity of the Osh Kosh outfall) which would be used for the mass balance to assist in the determination of what the WQBEL for P should be for the Osh Kosh effluent.

Thanks

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From: David Werbach/R5/USEPA/US
To: John Wiemhoff/R5/USEPA/US@EPA,
Date: 07/27/2012 08:37 AM
Subject: Re: Request for Information

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From: John Wiemhoff/R5/USEPA/US
To: Werbach.david@Epa.gov,
Date: 07/26/2012 09:50 PM
Subject: Request for Information

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**David:**

I am reviewing a permit of **Osh Kosh WI which discharges to the Fox River immediately before it enters Lake Winnebago.**

1. Do you know if there is a TMDL for this area and downstream stretch of river and Lake?

**A TMDL was approved for the Lower Fox starting at the outlet from Lake Winnebago. We did not develop any specific WLAs for any facilities upstream of the lake, but the TMDL is based upon a general 40% reduction in phosphorus and TSS loads in Lake Winnebago.**

2. Is this stretch an impaired water and if so, what are the impairments?

**Lake Winnebago is impaired for total phosphorus, TSS, mercury and PCBs. The Fox River at Oshkosh is listed for PAH's**

Thanks

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